Site:
Break: 1.1
Other: 5/5/85?

PCB CONTAMINATION - LAKE HARTWELL/PICKENS COUNTY, SC

EXECUTIVE SUMMARY DRAFT

Over the past ten years, EPA, the South Carolina Department of Health and Environmental Control (SC-DHEC), and CDC have been investigating the occurrence of polychlorinated biphenyls (PCBs) in Pickens County, South Carolina. Specific sites and water bodies which have undergone environmental testing include the Sangamo Weston Co., several abandoned landfills, Twelve Mile Creek, Six Mile Creek, Lake Hartwell, and Easley-Central water district. Sangamo Weston Co. was the site of PCB contamination of Twelve Mile Creek, Six Mile Creek, and Lake Hartwell in the middle 1970's. At that time potential sources of PCBs were identified as the plants wastewater treatment site, and abandoned dump sites that contained old PCB capacitors.

The residents of Cateechee, SC have expressed concern and initiated lawsuits with Sangamo and two other companies over alleged health effects resulting from exposure to PCB. However, blood tests performed on a random sample of these residents indicate they have blood serum levels of PCB no higher than what may be observed in the general U.S. population.

EPA and SC-DHEC have conducted studies of fish, soil and water samples from dumps and landfills, water and sediment samples from Sangamo, and raw and finished drinking water from local water treatment plants. EPA and CDC have reviewed environmental and biological data collected by SC-DHEC. Recent discharge monitoring report results indicate Sangamo's discharge levels are less than 1 ppb. Results from raw and finished drinking water samples at Easley Central have been fairly consistent, and show levels of PCB contamination below the EPA Ambient Water Quality Criterion of 1.03 ppb PCB for non-carcinogenic health effects. Trend analysis of PCB concentrations in fish tissue from 1977 to 1982 showed generally for all stations a significant downward trend, with the exception of one Twelve Mile Creek station that showed no significant trend. The most recent results of fish tests in the Tugaloo arm of Lake Hartwell ranged from 2.82 to 7.81 mg/kg. The FDA tolerance level for PCB residuals in fish tissues is currently 2 mg/kg.

A joint public health advisory issued by DHEC-EPA has been in effect since 1976 against consumption of fish from the Seneca arm of Lake Hartwell and Twelve Mile Creek. This advisory does not cover the Tugaloo arm. The most recent evaluations of the situation were performed in May and June by EPA and CDC. Both agencies have recommended that monitoring of the Easley Central water system be continued. Both agencies also agree as there is a small long-term health risk associated with chronic PCB exposure, efforts should be made to reduce PCB levels in drinking water as low as may be reasonably achievable. EPA-WMD is continuing to work with SC-DHEC to reduce potential human exposure, and have recommended corrective actions including routine flushing of the water distribution system. CDC currently recommends that in addition to monitoring, an attempt should be made to evaluate the source of the PCB contamination and control methods. EPA has not yet transmitted to SC-DHEC WMD's and CDC's recent evaluations, although CDC has sent SC-DHEC a copy of their evaluation.

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